Web Map Services
in support of Military Operations

By

Maj E.S. Godin

12 October 2017
MCE
We show the Way

Outline

• Aim
• Composition of MCE Web Map Services
• Technology & Infrastructure
• Clients
• Demonstration
• Challenges
• Road Ahead
Describe how military mapping is exploiting the latest GIS technology.

Demonstrate risk mitigation when using open source data while remaining relevant during operations.
• Web Services Section (WSS) is comprised of both Military Geomatics Technicians and Civilian public servants

• Esri professional services support

• Opportunities for University Co-op Students
Services Group

- Publishes data and imagery using ArcMap 10.4.1 or ArcGIS Pro
- Geo-processing services using Python
- Usage analytics and metrics reports using MSSQL Server

Applications Group

- Creates custom apps & widgets using Web AppBuilder (Developer Edition)
- Hosted on Web Adapter
- Customizable templates utilizing DND common look, feel & functionality published to Portal
• Clients include DND and CAF organizations.
  • Requests application-specific web products.
  • Requires responsiveness from WSS members.

• WMS Presence on:
  • Internal network (DWAN) using Esri Portal 10.4.1
    • Access to view non secure products to all DWAN users
    • Named Users can create content and application.

• Open Internet using ArcGIS Online:
  • User Access to custom content.
  • Ability for users to access custom web applications.
  • Ability for named users to upload content and create custom maps and applications.
Your gateway to digital mapping products

MCE Web Services enables users to:
- View and save defence mapping products and data
- Create and share custom mapping layers
- Upload and visualize coordinate and other geospatial data

Quick Links / Liens rapides

Data & Products Catalog
Order maps and geospatial data online.

CAF Cobdenburn Service
View of CAF unit location and contact information.

Training Area Maps
View and download the latest edition training area maps.

DACS
View the latest aeronautical charts.

Support hydrographique

- HSU (Halifax)
- DND Navigation Notices
- BSU (Halifax)
- Avis de navigation du MDN

Aeronautical Support

The links below are the most current aeronautical products. For previous versions please login to the MCE FTP site.

- NOTAMS - Nav Canada
- Division Instrument Check Pilot (DICP)
- Division Instrument Check Pilot (DICP)
- Division Instrument Check Pilot (DICP)
- Digital Flight Information Publications (DFIP)
Examples

We show the Way

Download Maps for 2009 and 2015

Dynamic Legend
Custom Imagery 2009 and 2015
Downloadable Map Content
Ombudsman

https://www3.ombudsman.forces.gc.ca/map/index.html?appid=753384ec8378440d99a6bf95b9a2d8d3&locale=en-us
MCE
We show the Way

Operation LENTUS

https://mce-scarto.maps.arcgis.com
Challenges

• Firewalls
• Multiple Networks
• Validation of Data sources
• Redundancy and Resiliency
• Remaining Relevant
• Promotion (Information Campaign)
  • Among Military Geomatics Technician community
  • End-user education

• Technical developments
  • Data migration related to 10.4.1 upgrade
  • Open internet forward proxy (to resolve fire wall issues)
  • Upgrading legacy applications to new look-and-feel
  • Creating & integrating new widgets
• Aim
• Composition of MCE Web Map Services
• Technology & Infrastructure
• Clients
• Example/Demo
• Challenges
• Road Ahead
E-mail:

mce.operations@forces.gc.ca

DWAN:

https://geo-dw.defgeo.ottawa-hull.mil.ca/arcgis/

Open Internet:

https://mce-scarto.maps.arcgis.com